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EXAMINER

CARLSON, JEFFREY D

ART UNIT	PAPER NUMBER
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3622

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/640,011

Applicant(s)

ANTTILA ET AL.

Examiner

Jeffrey D. Carlson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 13-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as not being within the technological arts.

The claims are not within the technological arts. As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable

subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art"

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because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a

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§101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, these claims do not set forth positive limitation that are required to be carried out by a computer. Although the preamble mentions electronic storage, the body of the claims do not require such. Applicant should include language in the body of the claim requiring computer-based limitations

2. Claims 13-16 are further rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as being purely a collection of data. The claims set forth a stored coupon comprising a collection of data (indicators). Such data is taken to be functionally descriptive material and because it is a disembodied data structure, it is not statutory. The collection of data is taken to be merely an abstract idea. There is no useful, concrete and tangible result.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

☞ Claim 13 line 7, it is unclear if an indicator which describes *any additional parameters* is a positive limitation. Are additional parameters required by the claims?

☞ Claim 20, it is unclear how displaying of bar codes and scanning of bar codes positively interconnects the terminal and POS. Applicant should set forth more clear language.

Correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 1-3, 8-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Barnett et al (US6336099).

Regarding claims 1-3, 9, 11, 14, Barnett et al teaches an online coupon distribution system where users access the coupon site using the Internet and request that copies of coupons be sent to their client devices [abstract]. The coupons include variables/data fields, including company for which the coupon/product is associated. The coupons are taken to have variable benefits. In a first manner, each data field of the coupon is a particular variable [fig 3]. Further, the coupons include an expiration

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date which serves to control/vary the value of the coupon according to date/time (outside the control of the user). However, Barnett et al also describes that the coupon benefits may be variable in another manner: the system is able to alter the value of coupons after they have been copied to the user's device [12:9-17].

Regarding claims 8, 10, the files sent to the user's computers can inherently be copied onto another user's machine as any computer file can be. Further regarding claim 10, a user may refer a friend to a specific coupon or the coupon system and in such a manner, the coupons are "shared." Two people may be given the same promotional offer/coupon.

Regarding claim 12, Barnett et al teaches wireless (satellite) Internet connections [fig 8].

Regarding claim 13, the coupon database includes data fields (1<sup>st</sup>:company data, 2<sup>nd</sup>:expiration date, 4<sup>th</sup>:redemption amount) representing the claimed indicators/parameters. While not clearly and positively claimed, the third indicator/parameter can be met by the "product data" specifying the associated product.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



8. Claims 4, 7, 15 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Barnett et al.

Regarding claims 4, 7, 15, Barnett et al teaches that the coupon amounts may be selected based on your profile/history of particular product purchases and coupon redemption habits [12:48-55, 64-67, 13:30-38]. Barnett et al also teaches that the system may change the value of downloaded coupons after they are downloaded. It would have been obvious, if not inherent, to have varied the benefit (value) of a coupon based on the customer's purchasing and redemption habits.

9. Claims 6, 10 (alternatively), 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnett et al.

Regarding claim 6, 10, 16, Official Notice is taken that availability of offers/coupons are discussed and recommended to friends. It would have been obvious to one of ordinary skill at the time of the invention to have informed a friend of the existence of specific coupons and/or the coupon system so that they may also acquire coupons. Doing so is taken to be sharing the coupons. As stated above, Barnett et al teaches targeting/changing the value of coupons based upon a particular user's profile. A referred/shared coupon may take many result in different values depending on the user.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnett et al in view of Baker (US6505046). Barnett et al does not teach location-based coupons.

Baker teaches a central offer/coupon server that downloads coupons to users depending on their location. It would have been obvious to one of ordinary skill at the time of the invention to have provided such features with mobile users of Barnett et al's system so that the offers are more compelling.


11. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Mankovitz et al (US5523794). Baker teaches downloading coupons from a central coupon host into a portable device. Baker teaches that the coupons can be displayed on the device and shown to the clerk at the POS for verification. Baker does not teach an interconnection between the portable device and the POS system; instead the data is manually routed through a clerk. Mankovitz et al also teaches acquiring coupons in a portable, wireless device (portable coupon). Mankovitz et al teaches that the stored coupons can be redeemed at the POS by displaying a coupon barcode on the device and having it read by the POS barcode scanning system. Mankovitz et al also teaches the use of an IR transmission between the POS and the portable coupon storage device. It would have been obvious to one of ordinary skill at the time of the invention to have provide any functionally equivalent interconnection between the portable device and the POS for coupon processing, including RF links as are well known.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Carlson whose telephone number is 703-308-3402. The examiner can normally be reached on Mon-Fri 8:30-6p, (off on alternate Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on 703-305-8469. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

  
Jeffrey D. Carlson  
Primary Examiner  
Art Unit 3622

jdc